

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer, and Assignee reserves the right to claim this subject matter in a continuing application:

1. (Currently Amended) A scanner ~~having a light source with a self-collection capability, wherein the scanner is suitable for use in scanning a document,~~ comprising:

an optical scanning chassis having a light source, wherein the light source comprises:

a primary light source comprising a tube having a first end and a second end, wherein [[a]] the tube of the light source at includes a tube wall is implemented with having a total reflective material applied thereon, wherein the total reflective material has such that an opening for emitting a light beam onto the document, where the light beam is a collected light from [[a]] scattered light is formed; and

a first and a second auxiliary light source, disposed proximate to the first and second ends respectively of the primary light source; and

a transmission assembly for supplying [[a]] driving power to the optical scanning chassis to accomplish the scanning operation step by step.

2. (Currently Amended) The scanner of claim 1, wherein the total reflective material is coated on an outer wall of the tube of the primary light source.

3. (Currently Amended) The scanner of claim 1, wherein the total reflective material is coated on an inner wall of the tube of the primary light source.

4. (Currently Amended) The scanner of claim 1, ~~further comprising a first auxiliary light source and a second auxiliary light source, wherein the first auxiliary light source and the second auxiliary light source also have the self-collection capability and are arranged at both sides of the light source~~ separately comprise a tube at least partially coated with total reflective material.

5. (Currently Amended) The scanner of claim 4, further comprising a controlling circuitry, ~~used for adjusting~~ adapted to adjust a light output intensity of the first and the second auxiliary light sources.

6. (Currently Amended) A scanner ~~having a light source with a self-collection capability, wherein the scanner is suitable for use in scanning a document,~~ comprising:

an optical scanning chassis, ~~which includes~~ having a light source, comprising:

a primary light source comprising having a tube with having a tube wall, wherein the tube wall includes a converging lens wall portion, adapted to collect scattered lights into a light beam light and then emit the a light beam out to the document; and

a first and a second auxiliary light source, disposed proximate to the first and second end respectively of the primary light source; and

a transmission assembly for supplying [[a]] driving power to the optical scanning chassis ~~to accomplish the scanning operation step by step.~~

7. (Currently Amended) The scanner of claim 6, ~~further comprising a first auxiliary light source and a second auxiliary light source, wherein the first auxiliary light source and the second auxiliary light source also have the self-collection capability and are arranged at both sides of the light source separately~~ each comprise a tube at having a converging lens wall portion.

8. (Currently Amended) The scanner of claim 7, further comprising a controlling circuitry, ~~used for adjusting~~ adapted to adjust a light output intensity of the first and the second auxiliary light sources.

9. (Currently Amended) A light source ~~having a self-collection capability, wherein the light source is suitable~~ adapted for use in a scanner, the light source comprising:

a primary light source comprising a tube having a tube wall, a first end, a second end, and a center portion, wherein the tube wall has a total reflective material applied thereon is implemented on the tube wall, and the total reflective material produces the self-collection capability and has such that

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an opening for emitting out a light beam is formed, wherein the total reflective material applied proximate to the first and second end comprises a total reflective material having a higher density than the material applied to the center portion of the tube wall after being collected; and
a plurality of electrodes, disposed at both sides of the tube.

10. (Currently Amended) The light source of claim 9, wherein the total reflective material is ~~coated on~~ applied to an outer side of the tube wall.

11. (Currently Amended) The light source of claim 9, wherein the total reflective material is ~~coated on~~ disposed on an interior side of the tube wall.

12. (Cancelled)

13. (New) A scanner, comprising:

means for collecting scattered light;

means for emitting the collected light as a beam of light having a light flux density greater than the scattered light; and

means for sensing at least a portion of the emitted light reflected from an item to be scanned.

14. (New) The scanner of claim 13, further comprising:

means for collecting electronic data representative of the sensed light.

15. (New) The scanner of claim 13, wherein the means for sensing comprises a light sensing device.

16. (New) The scanner of claim 13, further comprising:

means for emitting a plurality of additional beams of light; and

means for compensating the collected light by use of the plurality of additional beams of light.

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17. (New) The scanner of claim 13, wherein the means for collecting and means for emitting comprise:

a primary light source comprising a tube having a tube wall, wherein the tube wall includes a converging lens wall portion.

18. (New) The scanner of claim 13, wherein the means for collecting and means for emitting comprise:

a primary light source comprising a tube having a tube wall, having a total reflective material disposed thereof, such that an opening is formed.